

**IN THE UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF ILLINOIS**

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|---------------------------|---|------------------------|
| UNITED STATES OF AMERICA, |) | |
| |) | |
| Plaintiff, |) | Case No. 05-CV-242 DRH |
| |) | |
| vs. |) | CJRA Track: C |
| |) | |
| APEX OIL COMPANY, INC |) | Hon. David R. Herndon |
| |) | |
| Defendant |) | |

**APEX OIL COMPANY, INC.'S MEMORANDUM IN SUPPORT OF
ITS MOTION IN LIMINE TO PRECLUDE AND STRIKE TESTIMONY
AND REPORT OF THERESA A. GUSTAFSON**

I. INTRODUCTION

In January, 2006, Plaintiff 's counsel, Jeffrey Spector, contacted Ms. Theresa Gustafson for the purpose of seeking her services on behalf of the government in this action. Mr. Spector asked Ms. Gustafson if she could "evaluate the [oil] leak reports ...and if possible, if there's enough information in the documentation, to try to estimate the quantity leaked " (Dep. 56, 60.¹) Ms. Gustafson did put together a "very rough estimate"² as requested by Mr. Spector. However, as is more fully demonstrated below, Ms. Gustafson's very rough estimate is admittedly based on conjecture and speculation, and it does not satisfy the admissibility requirements of Rule 702, *Federal Rules of Evidence*, and the case law interpreting that Rule. Further, Ms. Gustafson's three related Conclusions in her Report (Ex. A, p. 1) are likewise not admissible under the strictures of Rule 702.

¹ All references to "Dep." are to the April 25, 2006, deposition of Theresa A. Gustafson. Attached as Exhibit B hereto, in sequential page order, are all citations herein to her deposition testimony.

² Ex. A to the Gustafson Dep., p. 5, last sentence in first paragraph. This Ex. A is attached to this Memorandum, also identified as Ex. A hereto.

II. STANDARD OF ADMISSIBILITY UNDER RULE 702

Admissibility of expert evidence is controlled by Rule 702, *Federal Rules of Evidence*, which provides:

“If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case ”

In 1993, the United States Supreme Court confirmed the trial court’s role in determining at the outset whether or not the proposed expert’s reasoning or methodology underlying the testimony is scientifically valid and whether that reasoning or methodology can be applied to the facts in issue. *Daubert v. Merrell Dow Pharmaceuticals, Inc* , 509 U.S. 579, 592-93 (1993). In short, the trial court is tasked by *Daubert* with a “gatekeeper” function with regard to admission of expert testimony. *Smith v. Ford Motor Company*, 215 F.3d 713, 718 (7th Cir. 2000).

With respect to Rule 702 expert witness admissibility issues, the *Daubert* court listed various non-exclusive factors the courts should consider: (1) whether the theory or technique can be (and has been) tested; (2) whether the theory or technique has been subjected to peer review; (3) the known or potential rate of error; and, (4) the general acceptance of the theory or technique. *Id.* at 594. *Daubert* emphasized that the inquiry envisioned by Rule 702 is a “flexible one” and that the “overarching subject is the scientific validity -- and thus the evidentiary relevance and reliability -- of the principles that underlie a proposed submission.” *Id.* at 594-95.

Qualification of the expert alone is insufficient; the expert’s proffered opinions must be shown to be **reliable**. *Smith v. Ford Motor Co* , 215 F.3d 713, 718 (7th Cir. 2000) and *Caraker v. Sandoz Pharm. Corp* , 188 F. Supp.2d 1026, 1030 (S.D. Ill. 2001). The “hallmark” of this

reliability is the “scientific method, *i.e.*, the generation of testable hypotheses that are then subjected to the real world crucible of experimentation, falsification/validation, and replication.” *Caraker*, 188 F. Supp 2d 1026, 1030. Lastly, the proposed expert testimony should “fit” -- *i.e.*, the “science” involved in the expert testimony must “fit” the issue on which the expert is opining. *O’Connor v. Commonwealth Edison Co.*, 13 F.3d 1090 at 1106 (7th Cir 1994) and *Caraker*, *supra*, at 1030.

As is detailed more fully below, Ms. Gustafson’s opinions are: (1) not based on sufficient facts or data; (2) her opinions are not the product of reliable principles or methods; (3) her opinions are not the result of principles and methods reliably applied to the facts; (4) her technique cannot be (and has not been) tested; (5) her opinions are not and cannot be subject to peer review; (6) it is impossible to calculate her potential rate of error; (7) there is no general acceptance of her technique which relies upon admittedly fragmentary and grossly incomplete information; (8) her method lacks the overarching concern for reliability; and (9) her opinions set out in her Report do not “fit” in that such opinions are not grounded in scientific theory, but rather are predicated on simple speculation and the application of multiplication tables to that speculation

III. THE FOUR CONCLUSIONS IN THE GUSTAFSON REPORT ARE NOT ADMISSABLE UNDER THE REQUIREMENTS OF RULE 702 AND RELATED CASE LAW

Ms. Gustafson’s Report (the “Gustafson Report”) contains four “Conclusions” that are outlined on page 1 of her report. Defendant will analyze each one separately for its compliance with the standards of Rule 702 and related case law. The principal conclusion is found in paragraph 4 so it will be considered first, followed by an analysis of conclusions numbered 1 through 3.

A “4. It is estimated that between approximately 720,000 and 1.4 million gallons of petroleum products were released to the environment from the Clark/Apex refinery and pipelines each year during this time frame [i.e., 10/67 to 10/88] due to leaks. It is likely that the volume released would have been at the higher end of the estimated range during the earlier portion of the timeframe of interest (prior to 1978) when the 10” terminal lines were still in use.”

This conclusion is based on Ms. Gustafson’s admittedly “non-scientific”³ and “very rough estimate”⁴ which in turn is based on multiple assumptions, incomplete information, and speculation. Because it would unduly lengthen this Memorandum, a complete listing of the deposition admissions of Ms. Gustafson regarding her lack of necessary information and knowledge to properly make a scientific calculation of the volume of product released to the environment by Defendant is contained on Ex. C hereto

Ms. Gustafson’s leakage estimation is based simply on a review of certain documents (whose purpose and accuracy are admittedly unknown to Ms. Gustafson) which were given to her by counsel for Plaintiff, certain unconfirmed speculations and additional assumptions regarding the average daily crude throughput at the Defendant’s refinery between 1967 and 1988, and Ms. Gustafson’s “feeling”⁵ about what percentage of the daily throughput was released through leaks into the environment. This type of expert opinion evidence does not even come close to satisfying the requirements of Rule 702 and the case law related thereto.

³ See Dep. at 195-96.

⁴ See Ex. A, page 5, last sentence of first paragraph.

⁵ Dep. 176-77.

More specifically, what Ms. Gustafson did in connection with her conclusion no. 4 was: (a) very roughly estimate, based on incomplete and fragmentary evidence, the average daily throughput of product over a twenty year period; (b) very roughly estimate, based on very skimpy and isolated data, the annual amount of product shortage lost through the leaking of product into the environment over that twenty year period; (c) then multiply the figure assumed in (a) by the percentage assumed in (b) to arrive at an annualized estimate of the yearly volume of product leaked into the environment. (See Attachment E to Ex. A hereto and Ex. C.) The problem with this approach is that it is totally unreliable.

Applying the standards of Rule 702 and the related case law as set out above, it is manifest that Ms. Gustafson's conclusion no. 4 is not admissible:

1 Can and has Ms. Gustafson's "technique" been tested? The answer to this first inquiry is clearly "no". Her "technique" (if it can be called that) is to simply proclaim that there is insufficient data to do a "scientific" or proper calculation, so she is entitled to rely on the fragmentary evidence that Plaintiff's counsel has provided her and make her best guess. Her technique is premised on the accuracy of two key assumptions -- the average daily throughput over a 20 year period at the refinery, and the average percentage of the product leaking into the environment over that same 20 year period. It is not possible to test or challenge her estimates since there are no documents that reflect the true historical situation over the 20 year period. To simply "estimate" based on a few documents, the origins, purpose, and accuracy of which are not demonstrated, is simply undisguised guess-work. As stated by Judge Gilbert in the *Caraker* case, *supra*, at 1030: "[D]istrict courts must determine whether the expert's opinion 'is genuinely scientific [or] unscientific speculation offered by a genuine scientist.'" The gatekeeper function

of the Court requires the Court to exclude “subjective speculation that masquerades as scientific knowledge.” *Id.* at 1030

2. Has Ms. Gustafson’s technique been subjected to peer review? The answer to this inquiry is clearly “no”. Rough estimates, using assumed numbers that are based on fragmentary and isolated documents whose accuracy has not been demonstrated, would realistically never be offered for peer review.

3. What is the known or potential rate for error? There is obviously no known rate of error for guess-work of the nature involved here, nor is it possible to specifically identify a potential rate for error. Put simply, where one estimates total average yearly throughput of a refinery, and the average spillage of product from that refinery into the environment, based on extremely limited and isolated documentation that has not been demonstrated as accurate, the potential rate for error is unlimited.

4. What is the general acceptance of the technique? There is no general acceptance of guess-work of the type involved here in the scientific community. Even Ms. Gustafson admitted that her estimates were not “scientific” (Dep. 195-96). To put it briefly and bluntly, Ms. Gustafson did the best she could with what she had to work with in order to come up with some estimate to support her client’s position. However, this does not elevate her speculation into “expert evidence” admissible in court concerning the volume of leaked product over a 20 year period.

5. Are Ms. Gustafson’s conclusions reliable? For the reasons already outlined above, Ms. Gustafson’s estimates are not reliable because they are not grounded on any substantial, relatively comprehensive, authoritative, and/or accurate documentation or knowledge. As is clearly shown by a review of Exhibit “C” hereto, Ms. Gustafson’s opinions are based on a very

few and isolated documents, the purpose, accuracy, and basis for which are unknown to Ms. Gustafson, along with her “feelings” about what an appropriate average loss of product into the environment was over a 20 year period. It is evident that such testimony cannot reasonably be considered reliable.

6 Does Ms. Gustafson’s testimony “fit” the issue she is addressing? This last inquiry relates to the question of whether Ms. Gustafson’s expertise “fits” the issue that she is addressing in the opinion in question, *i.e.*, calculating the amount of product leaked into the environment by the refinery over a 20 year period. A review of her deposition testimony and the Gustafson Report demonstrates that this “fit” is lacking. Ms. Gustafson’s opinions are not based on her particular expertise and background, but rather are predicated on the assumption that a few documents serve as a basis to identify the average throughput of the refinery over a 20 year period, and a “feeling” that between 1 and 2 percent of product losses are due to spillage. The balance of her opinion is nothing more than grade school mathematics, applying the percentages assumed to the total throughput assumed. In short, Ms. Gustafson’s professional background and experience does not serve as a basis to validate her speculation and the subsequent application of basic arithmetic to that speculation.

Ms. Gustafson’s opinion no. 4 is not admissible under Rule 702

B “1. Leaks from the Clark/Apex terminal and river pipelines during the October 1967 - October 1988 timeframe resulted in the release of significant quantities of petroleum products underground beneath the Village of Hartford.”

This conclusion is based on nothing more than newspaper reports, various governmental agency reports, and various documents of the several oil companies that conducted operations at the Hartford, Illinois area over an extended period of time dating back to at least the 1940s. This

conclusion contains nothing new to what has been reported publicly about the site for many years and does not involve the need for explanation by “an expert witness.” In the section of Ms. Gustafson’s report entitled “Leak History”, she refers to reports of leaks from the U.S. EPA, the Illinois EPA, and the Hartford Police Department Reports. In this same section of her report, Ms. Gustafson goes on to speculate that there “is a strong *possibility* that additional undocumented releases occurred during the October, 1967 - October, 1988 timeframe...” (Emphasis added, Ex. A, p. 3.) The foregoing does not meet the criteria set out in Rule 702 and related case law.

1. Can and has Ms. Gustafson’s “technique” been tested? This criteria is not applicable here since merely reading and re-stating what has been reported in other sources can hardly amount to a “technique.”

2. Has Ms. Gustafson’s “technique” been subject to peer review? Again, this criteria is not applicable here since there is nothing to be “peer reviewed”. The “technique” involved here is simply re-stating what has been reported from other sources.

3. What is the known or potential rate for error? It is not possible to specify or approximate a rate for error since the only conclusion being stated is that there have been leaks in significant quantities from the Clark/Apex terminal and river pipelines during a 20 year time period. That leaks have occurred is not disputed; whether they were “significant” is not a matter about which sufficient facts are known such that one could assign a known or potential rate of error to that statement.

4. What is the general acceptance of the technique? While it may be generally accepted to provide background information based on newspaper and governmental reports, “scientific opinions” are not predicated on such hearsay reports. There is nothing in the record, the

Gustafson Report, or her deposition that suggests there is general acceptance in the scientific or technical community that facts contained in reports of third parties are sufficient to establish the validity of such facts.

5. Is Ms. Gustafson's conclusion reliable? To the extent that Conclusion No. 1 claims the leaks were "significant", her conclusion lacks reliability because none of the sources she refers to and relies upon in her report support the conclusion that such leaks were "significant". In her deposition, when she was asked about her knowledge regarding the volume or quantity of reported leaks from Apex's facilities, she consistently indicated she did not know the volume or quantities because these facts were not reported. (*See* Dep. 102-06, 109, 111-12, 118-19, 134-35, and 141-42.)

6. Does Ms. Gustafson's testimony "fit" the issue she is addressing? Ms. Gustafson's opinions that the leaks from the Clark/Apex terminal and pipelines were "significant" does not "fit" here because the opinion expressed here is not based on, or justified by, her particular expertise and background. There is nothing in Ms. Gustafson's education, background, and experience that qualifies her to express an opinion that the leaks from the Clark/Apex terminal and pipelines over a 20 year time period were "significant" since she bases this conclusion on reports from third parties that do not substantiate the volume or amount of any of the reported leaks. This opinion relates to a factual matter that concerns the amount or volume of product leaked into the environment. This is a question that only knowledge of the facts can address, and Ms. Gustafson's expertise simply does not "fit" here to provide the required connection to her expressed opinion. As the Court in *Dhillon v. Crown Controls Corp.*, 269 F.3d 865, 871 (7th Cir. 2001) said: "[A]n expert must testify to something more than what is obvious to the layperson in order to be of any particular assistance to the jury." Here, the fact of leaks is

obvious to any layperson from the reports referred to; any suggestion, however, that the leaks had a “significant” volume associated with them in the absence of any fact suggesting same, is simply outside of the expert’s knowledge and remains an unknown factual issue.

Conclusion No. 1 does not satisfy the requirements of Rule 702.

C. “2. External corrosion due to bare pipe, proximity of neighboring lines, and presence of acid gases played a significant role in causing or contributing to the releases.”

In the “Background” section of the Gustafson Report (at p. 2), she states that in 1983 Clark installed new river pipelines alongside the original river lines, and abandoned the old river lines in place. In her deposition, Ms. Gustafson admitted that she does not know anything about the anticorrosion methodologies utilized in connection with the new river lines. (Dep. 101.) Further, her report states that although the available documentation does not indicate whether the original river pipelines installed in 1944 were coated, “anecdotal evidence” suggests they were bare. (Gustafson Report, p. 3.) In her deposition when asked what this anecdotal evidence was, she said that in “a conversation with Mr. Spector [counsel for the government], he indicated that I believe one of the other experts in the case had had a conversation with someone who said he thought the lines were bare.” (Dep. 132.) Ms. Gustafson did not know who this other expert was, nor did she know the other person with whom this expert allegedly had this conversation. (Dep. 132-33.) She has no documentation regarding this anecdotal evidence. (Dep. 133.)

In regard to other evidence to support this conclusion regarding bare pipe, the Gustafson Report states: “While coal tar enamels were commonly used as pipeline coatings during that era [circa 1944], it is estimated that only about 50% of underground pipelines were coated in 1944, so *it is quite feasible that the river lines were bare.*” (Emphasis added, Gustafson Report, p. 3,

last paragraph.) When asked about this statement in her deposition, Ms. Gustafson admitted that she did not know if the river lines were coated when installed in 1944. (Dep. 133.)

Ms. Gustafson's Report also claims that the 10 inch terminal lines installed by Sinclair Refining (Clark's predecessor) in 1952 were not coated as documented by the 1979 report on the hydrostatic testing performed that year by ARCO Pipeline Company. (Gustafson Report, p. 4, top) However, on examination in her deposition, Ms. Gustafson admitted this testing related to only one of the two terminal lines and that she did not know which of the two 10 inch terminal lines was inspected in the report on which she was relying ⁶ (See Dep. 133-135.)

The Gustafson Report also indicates (p. 4, last sentence in third paragraph) that "as recently as 1983, no cathodic protection had been used on the Clark lines." In her deposition, however, Ms. Gustafson admitted that the only thing she had to support this statement was the handwritten notes of Mr. Grove of Sinclair Marketing Company in 1983. Ms. Gustafson admitted that she had done nothing to contact or call Mr. Grove to confirm this statement, nor does she even know if Mr. Grove is still alive. She is simply accepting everything in that handwritten note as true and accurate. (Dep. 138-39.)

Lastly, the Gustafson Report indicates (p. 4, last paragraph) that "no records were provided [to her] that reflected any type of routine inspection and maintenance programs for the river and terminal pipelines." In her deposition, however, Ms. Gustafson admitted that she did not know what inspection and maintenance programs for the river and terminal pipelines were in place during the Clark and Apex eras, and whether in fact they did or did not have such

⁶ This is significant because Ms. Gustafson admitted that ownership of one of these two lines may well have been retained by Sinclair Refining when it sold certain assets to Clark Oil, and hence would not have been subsequently acquired by Apex when it succeeded to Clark Oil's assets. (See Dep. 98-99.)

programs, because she hasn't received any documentation relating to this. (Dep 140.) Based on the foregoing, Ms. Gustafson's conclusion no 2 is not admissible under Rule 702.

1. Can and has Ms. Gustafson's "technique" been tested? The "technique" involved in Conclusion No. 2 is again a statement of fact (regarding alleged causes for the supposed deteriorating condition of pipelines) that is based on oral statements by Plaintiff's counsel and on documents given to Ms. Gustafson to review by counsel for the plaintiff. As illustrated by the preceding four paragraphs, the factual bases for her opinions are grounded on quicksand -- 1) anecdotal evidence of hearsay upon hearsay of unidentified persons reported to her by Plaintiff's attorney; 2) pure speculation that since 50% of underground pipelines were not coated in 1944 era, "it is quite feasible that the river lines were bare"; 3) reliance on documents that upon close scrutiny are ambiguous in support of her statements (*i.e.*, reliance on the 1979 ARCO hydrostatic testing on a pipeline not known to belong to Clark/Apex); and 4) reliance on documents sent to her by counsel for Plaintiff that she simply accepted as factually true even though she made no effort to confirm the accuracy of the statements relied upon in the document. Clearly, such "technique" has not and cannot be tested.

2. Has Ms. Gustafson's technique been peer reviewed? For the same reasons already pointed out in part B.2 above, this criteria is not applicable as there is nothing to be "peer reviewed". The "technique" involved here is nothing more than reporting what is supposedly found in other documents.

3. What is the known or potential rate for error? Since there is no real "technique" involved in simply re-stating what is contained in other documents and/or oral statements from third parties, it is meaningless to talk about the known or potential rate for error in this "technique." Obviously, for the reasons pointed out above, there is significant room for

misinterpretation of documents relied upon, or for unreliable evidence to be repeated from oral statements which contain hearsay upon hearsay from unidentified sources.

4. What is the general acceptance of the technique? While it may be generally accepted to provide background information based on the type of documents mentioned in the Gustafson Report, “scientific opinions” are not predicated on such hearsay reports and oral statements of unidentified persons. There is nothing in the record, the Gustafson Report, or her deposition that suggests there is general acceptance in the scientific or technical community that facts contained in reports and oral conversations of third parties, such as that relied upon here by Ms. Gustafson, demonstrate the validity of such facts

5. Is Ms. Gustafson’s conclusion reliable? As demonstrated above, the Gustafson deposition discloses that this Conclusion No. 2 is predicated upon: 1) notoriously unreliable “anecdotal evidence” from someone who heard someone else say something as reported to Ms. Gustafson by Plaintiff’s counsel; 2) pure speculation grounded in general testimony that approximately 50% of underground pipelines from the 1944 era were not coated; 3) documents which are ambiguous in relation to supporting the facts for which they are cited; and, 4) documents which are simply assumed to be true and with respect to which no effort was made to confirm with the author of the document the statements Ms. Gustafson relied upon therein. All these factors militate against any belief that Conclusion No. 2 satisfies the reliability standard of Rule 702.

6. Does Ms. Gustafson’s Conclusion No. 2 “fit” the issue she is addressing? For the same reasons set forth in part III.B.6, *supra*, Ms. Gustafson’s opinions do not “fit” the issue she is addressing. There is no correlation between her expertise and the opinion she is offering relating to the deteriorating condition of the pipelines. Her opinion on this matter is based on

documents and hearsay that are unconnected to her area of expertise. Accordingly, there is no “fit” or connection between this opinion (conclusion No. 2) and Ms. Gustafson’s expertise.

Conclusion No. 2 does not satisfy the requirements of Rule 702.

D **“3. The failure to properly isolate lines that had been abandoned in place resulted in two of the releases.”**

It is not necessary to review all the various criteria under Rule 702 with respect to conclusion no. 3. The reason this conclusion is not the proper subject of an “expert opinion” is simple: it is a statement of fact that requires no expertise for its proof, and the fact that a witness may otherwise be qualified as an expert does not make proof of this fact admissible. In short, like Conclusion Nos. 1 and 2, these are statements of fact that depend solely upon the knowledge of the witness about the facts in issue, and the qualification of a witness as having special knowledge regarding environmental issues and problems does not qualify such witness to express opinions on the existence of facts as set forth in this conclusion no. 3. In terms of the various requirements of Rule 702, the proffered opinion does not “fit” the issue addressed.

IV. CONCLUSION

For all of the foregoing reasons, it is respectfully submitted that the Court grant Defendant’s Motion in Limine to Preclude and Strike Testimony and Report of Plaintiff’s Expert Witness, Theresa A. Gustafson, and for such other and further relief as the Court deems appropriate.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on the 6th day of September, 2006, I electronically transmitted the foregoing document to the Clerk of Court using the ECF System for filing and transmittal of a Notice of Electronic Filing to the following ECF registrants:

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